#### Strategic Corridor Planning

# 6<sup>th</sup> Access Management Conference Park City, UT

John Taber, Ph.D., PE Trafmetrics, Inc. Heber, UT

#### Workshop Outline

- Why a Strategic Plan
- Planning Corridor Access Points
- How UDOT Does It
- Case Study: US-40/SR-189
- Your Turn At It
- Current UDOT Actions on Corridor



- Function
- Development
   Pressures
- Intersection Con



University Pkwy, Orem, UT ADT: 39,000

- Long-TermVision
- Intersection Control & Design



Bangerter Hgwy, UT ADT: 58,000

- Long-TermVision
- Function
- Access Control



Kimball Junction, UT ADT: 30,000

#### Why A Strategic Plan

"An organization needs a strategic plan to make decisions today that will give the flexibility to make the right decisions in the future which you don't know about"

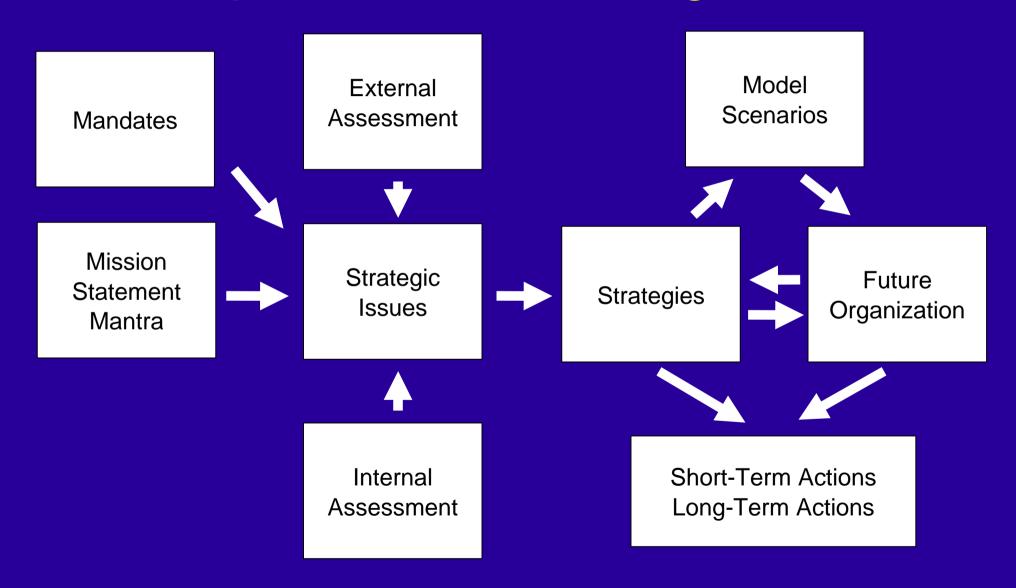
Peter Drucker

# Why A Strategic Plan

• "I skate to where I think the puck will be"

Wayne Gretzky

#### Components of a Strategic Plan



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#### **Mission Statements**

- Speed, Flexibility
- Mantras Guiding Principal
  - Wal-mart: "Everyday Low Prices"
  - FedEx: "Absolutely, Positively Overnight"
  - United: "Fly The Friendly Skies"
  - Trafmetrics: "Planning Transportation Smarter, Faster, Better"

#### **External Assessment**

- SWOT
  - Strength, Weakness, Opportunities, Threats
- Political Trends
- Economic Trends
- Technical Trends

#### **Internal Assessment**

- Resources
  - Personnel
  - Budget, Facilities
- Present Strategies
- Performance

# Strategic Issues

- Tie to DOT Goals
  - Safety
  - Efficient Travel
  - Provide Traveler Info
  - Work w/ Other Govt.Agencies
  - Customer Svc.



Main St Heber, UT ADT: 17,000

#### **Model Scenarios**

- Sketch-Level
  - Concept Analysis
  - Rules of Thumb
- Detail Level
  - Corsim, Vissim 3D



### **Future Organization**

- DOT Organization
- Road Ownership
  - Sustainable Network
  - Privatization



Northwest Pkwy, CO ADT: ?

#### **Short/Long-Term Actions**

- Access Plan
- Improvements
- Realignments
- Zoning Agreements between DOT & Local Govt.



#### **Frequent Mistakes**

- Launching Full Scale Actions w/o Testing
- Righteous Arrogance
- Going With "What Everyone Knows"
  - Usually This is 20Years Old
- Patching Up Failing Strategies
- Implementing



Bangerter Hgwy, UT ADT: 50,000

# Winning Strategies

- Learn From Mistakes
- Alternative Analysis: What's Creating The Congestion?
- Do What You Believe In
- Follow The Opportunities, Needs
- "Kaizen"



Lynchburg, VA

#### **The Corridor 15**

#### Access Planning Techniques

- Concept Time is Critical
- Form Follows Function (Pk City)
- Flyovers
- View Corridors
- Urban Boundary Creep





#### **The Corridor 15**

- DrivewayConsolidation
- Eliminate Angle Intersections
- ROW for Future Overpasses
- Frontage, Back,
   Parallel Collectors
- Back Collectors



#### **The Corridor 15**

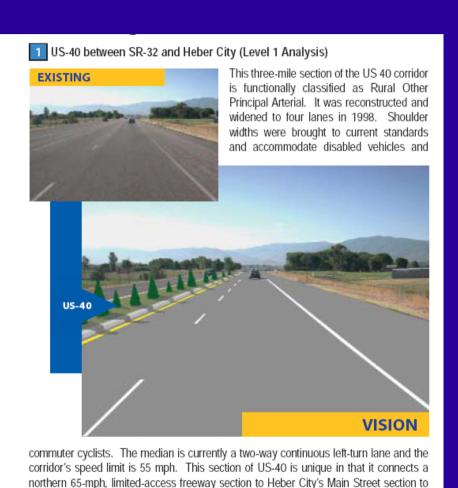
- Accommodate Multi-Modal (ped,bike,rail)
- Eliminate Offsets
- Eliminate Vertical Curves
- Median Design & Crossover Spacing
- ByPasses –
   Lynchburg,Garden City,

   Heber, Nephi



#### **UDOT Corridor Studies**

- Level I Some Public Involve, Data mining Concept
  - preserving
  - safety
  - sketch analysis
- Minimum: have local govt maintain cross sections, std access (½ mi sig, ...



the south, which operates at 35 mph.

#### **UDOT Corridor Studies**

- Level II
  - Alternative analys
  - Public involvemer
  - Some environ. iss
  - recommendations
  - Leading to STIP

UDOT Region 3 is currently producing an Environmental Assessment for a proposed interchange for the SR-32/River Road intersection. A signal was installed at this intersection before the 2002 Winter Olympic Games to service traffic going to cross-country events at Soldier Hollow. The signal is operating below capacity, but does present safety concerns due to the fact that the north and east approaches have a significant down grade. The safety and operation of this intersection will be closely monitored to determine its best configuration.

Many developments are planned along the east side of the corridor, including a satellite campus for Utah Valley State College. These developments will add driveways and a significant amount of traffic to the highway. UDOT's Planning Section facilitated meetings with Wasatch County, city mayors, and other local government officials to discuss this corridor's future. These discussions showed overwhelming support for maintaining the highway as a high-speed, high-capacity facility. Access control through the corridor will play a major role in maintaining its capacity and safety. Future corridor planning will focus on consolidating driveways, improving safety, and strategically locating driveways. The projected needs of local bicyclists and pedestrians will need to be part of those discussions.

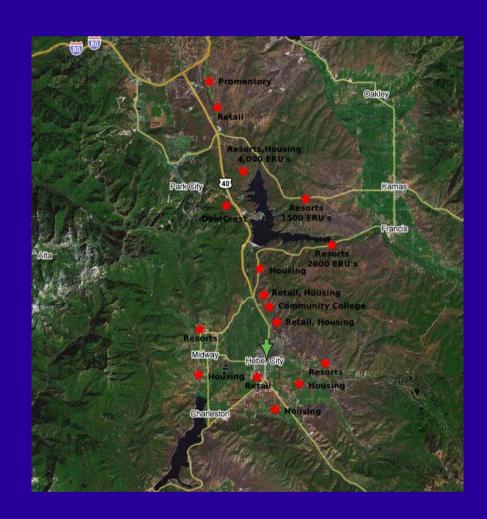
#### **UDOT Corridor Studies**

- STIP
  - preliminary engr
  - construction

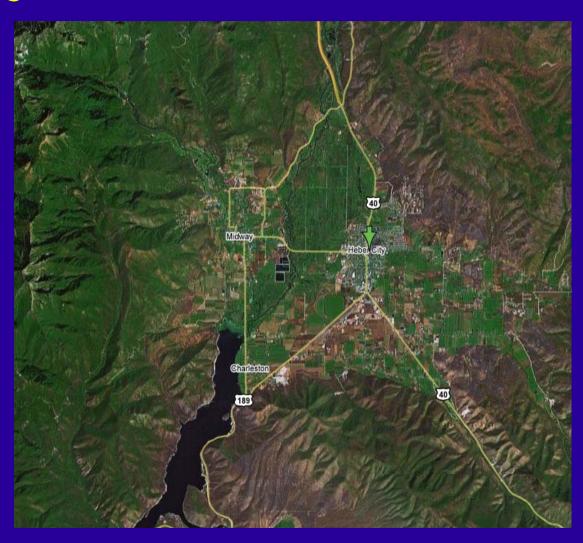
- Cut-Thru I-15 South I-80 East
- Context of System -Analysis & Importance
- Future: Oil & Gas
   Development



Major Land Developments



Missing Link:
 Segment
 Between
 Limited Access



US-40MayflowerInterchange



US-40 Mayflower, UT ADT: 18,000

US-40Transition at River Road



US-40 River Rd, UT ADT: 18,000

 North Side of Heb Valley



US-40 North of Heber, UT ADT: 16,000

#### Heber CBD



US-40 Heber, UT ADT: 18,000

- Heber South
  - Wal-Mart Plans



- Heber South
  - Airport



SR-189 Heber Airport, UT ADT: 10,000

Deer Creek
 Reservoir



SR-189, Charleston, UT ADT: 10,000

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#### Sundance



SR-189, Sundance, UT ADT: 12,000

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#### **Your Solution**

- Divide into Groups
- 15 mins
- List Plans



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#### What UDOT Has Done

New Access Agreement Conidor Access Agreement Regarding
US 40 within Wasatch County, Utah, entered into between
the UTAH DEPARTMENT of TRANSPORTATION
and WASATCH COUNTY

#### COOPERATIVE CORRIDOR ACCESS AGREEMENT

#### WITNESSETH:

WHEREAS, for the purposes of this Agreement, "the US 40 Corridor" is defined as that section of US 40 between mile post 13.21 (SR 32 / River Road) and mile post 16.32 (northern boundary of Heber City as of 2006, hereafter referred to as "Heber City Limits"), which is an access-controlled facility; and

WHEREAS, to facilitate traffic flow along the US 40 Corridor, as defined above, the parties hereto desire to designate specific access management and corridor preservation elements; and

WHEREAS UDOT has determined by formal finding that regulation of intersection and access points for future highway improvements are not in violation of the laws of the State of Utah or any legal contract with the County, and

WHEREAS this Agreement is made to set out the terms and conditions under which the US 40 Corridor shall be managed and preserved; and

WHEREAS the purpose of this Agreement is to establish a cooperative and communing agreement between the County and UDOT that identifies points of access with US 40 and documents transportation planning decisions made for the US 40 Cornidor as defined above; and

WHEREAS the aforementioned transportation planning decisions are focused on the functionality, safety and operation of the US 40 Corridor to establish points of access (Signalized/Street/Driveway) for the accommodation of existing and future development as well as serve the envisioned mobility for the area: and

WHEREAS this Agreement shows the specific access-management elements necessary to simultaneously maintain traffic flow, provide access to existing and anticipated development, and protect the public interest in highway capacity, safety and mobility; and

WHEREAS the US 40 Corridor is as a 4-lane highway with a continuous two-way left-turn median. Its posted speed is 55 miles per hour until just north of Heber City Limits where it is reduced to 35 miles per hour. The average annual daily traffic (hereafter "AADT") for the subject US 40 Corridor is currently about 15,000 vehicles per day. This volume is estimated to double in the next 20 years to 30,000 vehicles per day; and

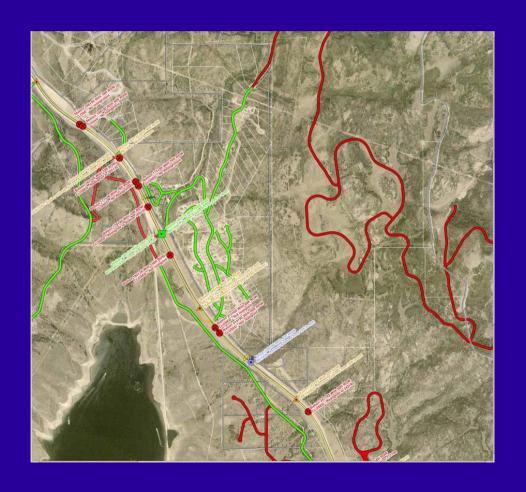
#### **Current Status**

- Set up RPO
  - Built Model
- County \$10 Fee For ROW Purchase
- Latest Route Plan
- Purpose & need



#### What UDOT Has Done

• SR-248 Access Plan



#### What UDOT Has Done

- SR-248 Access Plan
  - Detail



# "Our Strategic Plan Is To Do Something"

Herb Kellerher, Southwest Air

#### **Questions?**

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